

## LX Wedge Flowmeter

### Overview

LX wedge flowmeter has a simple structure, reliable performance, cheap price, convenient installation and use. It is used widely for the measurement of clean liquid, high viscosity fluid, corrosive fluid, seriflux and all kinds of gas including air, vapor, smudge coal gas, natural gas, and so on. It also can be used under the condition that pipeline Reynolds number is as small as 500 or medium viscosity reaches up to 500 Pa.s. The wedge flowmeter is suitable for the occasion ideally where traditional flow instrument can not be used. Its high accuracy, wide measurement range and wide application range are unbeatable.

### Features

1. With integrated transmitter, tri-valve set, integrated installation of differential pressure transmitter which need no guiding pressure pipeline, valve, pipe fitting, the whole system is simpler, and the measuring accuracy and reliability are better.
2. When select intelligent differential pressure transmitter, you can complete setting and configuration through HART protocol or communication mode (field bus protocol) for the process parameters. According to the flow change of measured medium, you can adjust differential pressure to widen system range largely; when select intelligent differential pressure transmitter with multiple parameters, you can realize multi-parameter measurement (differential pressure, volumetric flow, mass flow, pressure, temperature), and realize completing temperature and pressure compensation, output accurate flow signal directly.
3. With high accuracy, excellent repeatability and high precision differential transmitter which can realize accurate measurement of flow.
4. With steady measurement, and the flow coefficient keeps constant for a long time, the checking cycle is long.
5. With simple structure, high reliability and long service life. Resists abrasion and need no maintenance. (No moving parts)
6. With strong adaptive capacity for medium, can measure many kinds of fluid, besides general gas, liquid and vapor, it is especially suitable for high viscosity fluid, seriflux, corrosive fluid, fluid easy to crystallize, fluid with many suspended solids and smudgy fluid. Without problems such as keeping contamination in throttle element and blocking of pressure tap.
7. With wide measurement range rate (measurement range ratio), which can reach 10: 1 without second correction of instrument software.
8. It is more exquisite than venturi tube on the same level.
9. Has low requirement for straight pipeline's installation, can reduce or avoid additional measurement uncertainty of measuring system.

10. With small pressure loss and save energy.

## Main Technical Parameters

Accuracy	Be superior to $\pm 0.5\%$ reading (calibration)
Repeatability	$\pm 0.2\%$ reading
Range Degree	10:1 or wider
Pressure Loss	About 1/5 measured differential pressure (about 1/3 pore plate)
Suitable Medium	All kinds of liquid, gas and vapor.
Measured Liquid Viscosity	500MPa.s, or higher
Resisting Medium Pressure	Lower than 5MPa, and higher than 5MPa is OK.
Resisting Medium Temperature	Under 400°C
Wedge Ratio h/D	0.2, 0.3, 0.4, 0.5
Long-term Stability	$\pm 0.2\%$ F.S/Y

## Ordering Models

Model	Connecting and Pressure Getting Mode	Inside Nominal Diameter	Shell Material	Nominal Pressure	Permitting Working Temperature	Illustration
LX						Wedge flowmeter
	A					Thread getting pressure double-clip type
	B					Thread getting pressure thread type
	C					Thread getting pressure welding type
	D					Thread getting pressure flange type
	E					Flange getting pressure flange type
	F					Integrated installation connecting mode (temperature and pressure compensation)
	G					Integrated installation general type
		15~300				Inside nominal diameter 15~300mm
			I			Carbon steel
			II			Stainless steel
			III			Special material and special surface treatment
				0.25~5		Nominal pressure 0.5~5MPa

					A	-20~100℃
					B	100~250℃
					C	250~400℃